

IN THE CLAIMS

Please amend the claims as follows:

1. (Presently Amended) A system for preventing overload of a gateway's resources, ~~said gateway including a CPU and other resources~~, said system comprising:

a present Central Processing Unit (CPU) and other resources,

said CPU being adapted to calculate a CPU utilization value that indicates the present utilization of said CPU, ~~and a CPU utilization threshold~~, said CPU utilization value being independent of the utilization of said other resources;

a call deny flag which is set by said CPU when the present CPU utilization value is larger than the CPU utilization threshold; and

means for detecting an incoming call and for indicating refusal of the incoming call to the incoming call caller without answering the incoming call when the deny flag is set.

2. (Previously Presented) The gateway according to claim 1 wherein the CPU utilization threshold is set to a value below a total available processing capacity of the gateway to ensure calls currently established on the gateway have access to additional gateway processing resources.

3. (Presently Amended) A method for preventing overload in a packet processing device receiving incoming telephone calls, said device including a gateway with a CPU resource and other resources, said method comprising:

setting a Central Processing Unit (CPU) utilization threshold of a CPU of the gateway;

when an incoming telephone call is received, comparing a present CPU utilization value with the entered CPU utilization threshold, said CPU utilization value being independent of the utilization value of said other resources; and

indicating refusal of the incoming telephone call to a caller before the incoming telephone call is answered by the packet processing device when the present CPU utilization value is larger than the threshold.

4. (Previously Presented) The method of claim 3 including setting the CPU utilization threshold to an amount enough below a maximum CPU processing capacity to account for additional processing required for currently established calls.

5. (Previously Presented) The method of claim 3, further comprising determining the CPU utilization threshold for a bank of CPUs.

6. (Previously Presented) The method of claim 5, wherein setting is by issuing a setting command, and by saving an aspect of the setting command in non-volatile random access memory (NVRAM).

7. (Presently Amended) A computer-readable medium ~~containing~~ storing a program for preventing overload in a packet telephony gateway, the program comprising:

- a CPU utilization threshold value,

- an incoming call input when a new incoming telephone call is received;

- a present CPU utilization value input, said CPU utilization value being

independent of the utilization of other resources in said gateway;

- gauging software for determining, when a new incoming telephone call is denoted as being received, whether a number aspect of the present CPU utilization value input is larger than a number aspect of a CPU utilization threshold input, and if so for setting a deny flag; and

- call refusing software for the packet telephony gateway to refuse the incoming call if the deny flag is set prior to and without ever answering the incoming call.

8. (Presently Amended) The medium of claim 7, wherein

- a new ~~the~~ incoming call input sets a ring flag when a new incoming telephone call is received, and

- the present CPU utilization value input is updated when the ring flag is set.

9. (Previously Presented) The gateway according to claim 2 wherein the CPU utilization threshold is set to a pre-specified percent of the total available processing capacity of the gateway.

10. (Previously Presented) The gateway according to claim 1 wherein the processor detects the incoming call by monitoring a call ring flag.

11. (Previously Presented) The gateway according to claim 10 including updating the CPU utilization value each time the call ring flag is set.

12. (Previously Presented) The gateway according to claim 1 wherein the processor detects a ring signal for the incoming call and determines whether or not to refuse the incoming call prior to answering the ring signal.

13. (Previously Presented) The gateway according to claim 1 including refusing the incoming call by generating a busy signal.

14. (Previously Presented) The gateway according to claim 1 wherein the processor does not place refused calls in a queue.

15. (Previously Presented) A gateway including a system for preventing overload of gateway resources, said system comprising:

- a processor configured to receive both a present Central Processing Unit (CPU) utilization value and a CPU utilization threshold, said CPU utilization value being independent of the utilization of other resources in said gateway;

- the processor configured to set a call deny flag when the present CPU utilization value is larger than the CPU utilization threshold; and

- the processor configured to detect a received incoming call and configured to at least either answer the incoming call, accept the incoming call to be placed in a queue, or deny the incoming call;

- wherein the processor is configured to indicate refusal of the incoming call and deny the incoming call when the deny flag is set.

16. (Previously Presented) The gateway according to claim 15 wherein the CPU utilization threshold is set to a value below a total available processing capacity of the gateway to ensure that established calls on the gateway and accepted but unanswered calls in the queue on the gateway have access to additional gateway processing resources.

17. (Previously Presented) The gateway according to claim 16 wherein the CPU utilization threshold is set to about a pre-specified percent of the total available processing capacity of the gateway.

18. (Previously Presented) The gateway according to claim 15 wherein the processor detects the incoming call by monitoring a call ring flag.

19. (Previously Presented) The gateway according to claim 18 wherein the CPU utilization value is updated each time the call ring flag is set.

20. (Previously Presented) The gateway according to claim 15 wherein the processor detects a ring signal for the incoming call and determines whether or not to refuse the incoming call prior to answering the ring signal.

21. (Previously Presented) The gateway according to claim 15 wherein the processor refuses the incoming call by generating a busy signal.

22. (Previously Presented) The gateway according to claim 15 wherein the processor does not place refused calls in a queue.

23. (Previously Presented) The gateway according to claim 15 wherein the processor places accepted calls in a queue.

24. (Presently Amended) A method for preventing overload in a packet processing device receiving incoming telephone calls, said device including a Central Processing Unit (CPU) and other resources, said method comprising:

setting a CPU utilization threshold;

when an new incoming telephone call is received, comparing a present CPU utilization value with the entered CPU utilization threshold, said CPU utilization value being independent of the utilization of other resources in said device;

refusing to accept or answer the incoming call when the present CPU utilization value is larger than the threshold; and

indicating refusal of the new incoming telephone call to the incoming call caller.

25. (Previously Presented) The method of claim 24 including setting the CPU utilization threshold to an amount enough below a maximum CPU processing capacity to account for additional processing required for currently established calls and accepted but answered calls in the queue on the gateway.

26. (Previously Presented) The method of claim 24, further comprising determining the CPU utilization threshold for a bank of CPUs.

27. (Previously Presented) The method of claim 26, wherein setting the CPU utilization threshold is by issuing a setting command, and by saving an aspect of the setting command in non-volatile random access memory (NVRAM).

28. (Previously Presented) A computer-readable medium containing a program for preventing overload in a packet telephony gateway, the program comprising:

- a CPU utilization threshold value;

- an incoming call input indicating when an incoming telephone call is received;

- a present CPU utilization value, said present CPU utilization value being independent of the utilization of other resources in said gateway;

- gauging software for determining, when the incoming telephone call is denoted as being received and setting a deny flag when a number aspect of the present CPU utilization value input is larger than a number aspect of a CPU utilization threshold input; and

- call refusing software refusing the incoming call without answering the incoming call or accepting the incoming call for placement in a queue when the deny flag is set.

29. (Presently Amended) The medium of claim 28, wherein

- the a new incoming call input sets a ring flag when a new incoming telephone call is received, and

- the present CPU utilization value input is updated when the ring flag is set.